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Chief Exponent of the American Nursery Trade

Vol. XLVII No. 12 | JUNE 15, 1928 | Per Copy 20

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Arkansas Nurserymen's Ass'n.—J. E. Britt, Secy., Bentonville.

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Eastern Nurserymen's Association—Fred Worsinger, Sec'y., Tacony, Pa.

Fruit and Flower Club of Western New York—J. C. Hoste, Newark, N. Y.

Illinois Nurserymen's Association—N. E. Averill, secy., Dundee, Ill., Jan. 16-18, 1929, Hotel Sherman, Chicago.

Iowa Nurserymen's Association—Harold J. Parnham, secy., Capitol City Nurs., Des Moines. Nov. 1928, Cedar Rapids.

Kansas Nurserymen's Association—James N. Farley, Sec'y., Topeka.

Kentucky Nurserymen's Association—Alvin Kidwell, Secy., St. Matthews.

Massachusetts Nurserymen's Association—Winthrop H. Thurlow, secy., West Newbury.

Michigan Association of Nurserymen—C. A. Krill, secy., Kalamazoo.

Minnesota Nurserymen's Association—W. T. Cowperthwaite, Secy., 20 W. Fifth St., St. Paul.

Missouri Nurserymen's Association—George H. Johnston, secy., Kansas City Nurs., Kansas City, Mo.

Nebraska Nurserymen's Association—Ernst Herminghaus, Secy., Lincoln.

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New York Nurserymen's Association—Charles J. Maloy, secy., Rochester, N. Y.

Northern Retail Nurserymen's Association—C. H. Andrews, secy., Faribault, Minn.

Ohio Nurserymen's Association—Royce Pickett, secy., Clyde.

Oklahoma Nurserymen's Association—W. E. Rey, sec'y., Oklahoma City.

Pacific Coast Association of Nurserymen—C. A. Tonneson, secy., Burton, Wash. July 11-13, 1928, Olympic Hotel, Seattle, Wash.

Pennsylvania Association of Nurserymen—Floyd S. Platt, secy., Morrisville, Pa.

Rocky Mountain Nurserymen's Assn.—Chas. C. Wilmore, Secy., Box 382, Denver, Colo.

Rhode Island Nurserymen's Association—Daniel A. Clarke, Secy., Fiskeville.

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South Dakota State Nurserymen's Association—J. B. Taylor, sec'y., Ipswich.

Southeastern Nurserymen's Ass'n.—Otto Buseck, Sec'y., Asheville, N. C.

Southern Alabama Nurserymen's Ass'n.—W. H. Pollock, secy., Irvington.

Southern Nurserymen's Association—W. C. Daniels, Sec'y., Pomona, N. C., Sept. 12-13, 1928, Memphis, Tenn.

South Texas Nurserymen's Ass'n.—W. R. McDaniel, Sec'y., Alvin, Tex.

Southwestern Nurserymen's Association—Thomas B. Foster, Sec'y., Denton, Tex., Sept. 12-13, 1928, Memphis, Tenn.

Tennessee Nurserymen's Association—Prof. G. M. Bentley, secy., Knoxville, Tenn.

Twin City Nurserymen's Association—H. G. Loftus, Sec'y., St. Paul, Minn.

Western Association of Nurserymen—George W. Holsinger, secy., Rosedale, Kan.

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Say you saw it in "American Nurseryman"

AMERICAN NURSERYMAN --- June 15, 1928

EDITORIAL DEPARTMENT—Communications on any subject connected with Commercial Horticulture, Nurseries or Arboriculture are cordially invited by the Editor; also articles on these subjects and papers prepared for conventions of Nursery or Horticultural associations. We also shall be pleased to reproduce photographs relating to these topics, Orchard Scenes, Cold Storage Houses, Office Buildings, Fields of Stock, Specimen Trees and Plants, Portraits of Individuals, etc. All photographs will be returned promptly.

Advertising—Advertising forms close on the 25th of each month. If proofs are wanted, copy should be on hand one week earlier.. Advertising rate is $2.80 per column-width inch.

"AMERICAN NURSERYMAN" is distinctive in that it reaches an exceptional list and covers the field of the business man engaged in Commercial Horticulture—the cariot operator. Here is concentrated class circulation of high character—the Trade Journal of Commercial Horticulture, quality rather than quantity.

"AMERICAN NURSERYMAN" will not accept advertisements that do not represent reliable concerns.

SUBSCRIPTIONS—"AMERICAN NURSERYMAN," published semi-monthly, on 1st and 15th, will be sent to any address in the United States for $2.50 a year; to Canada or abroad for $3.00 a year. Single copies of current volume, 20c; of previous volumes, 25c.

RALPH T. OLCOTT
Editor, Manager

WHAT THIS MAGAZINE STANDS FOR—Clean chronicling of commercial news of the Planting Field and Nursery. An honest, fearless policy in harmony with the growing ethics of modern business methods.

Co-operation rather than competition and the encouragement of all that makes for the welfare of the trade and of each of its units.

Wholesome, clean-cut, ring true independence.

INDEPENDENT AND FEARLESS—"AMERICAN NURSERYMAN" makes no distinction in favor of any. It is untrammeled in its absolutely independent position and is the only Nursery Trade publication which is not owned by nurserymen.

☞ This Magazine has no connection whatever with a particular enterprise. Absolutely unbiased and independent in all its dealings.

Though it happens that its place of publication is in the eastern section of the country, it is thoroughly National in its character and International in its circulation.

Its news and advertising columns bristle with announcements from every news corner of the Continent.

It represents the results of American industry in one of the greatest callings—Commercial Horticulture in all its phases of Nursery Stock, Orchard and Landscape Planting and Distribution.

AMERICAN FRUITS PUBLISHING COMPANY INC.

39 State Street,
Rochester, N. Y.

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On your way to the National Convention in Denver arrange to stop over in Shenandoah, Iowa, on Saturday, June 16th.

Not only will this give you a pleasant "break" in your trip, but you will enjoy an interesting and profitable day as guests of the Nursery and Seed firms of Shenandoah, Iowa.

A Special Train From Chicago

The Burlington Route will provide a special Pullman train with diner. This train will leave Chicago Friday, June 15th at about 6:15 P. M., arriving in Shenandoah 8:30 Saturday morning, leaving at 4:00 P. M., arriving Denver 9:00 A. M., Sunday. Special Pullman cars will be provided from St. Louis.

Plenty of Entertainment

The program for the day allows ample time for a motor trip over the Nurseries and to visit the Radio Broadcasting Stations KMA and KFNF, as well as the mail order Nursery and Seed establishments. Arrangements will be made for speeches by visitors over both Radio Stations.

Lunch will be served at noon and a good orchestra will provide music for dancing.

Your Convention Trip will not be Complete without a Day in Shenandoah—Plan Now.

MOUNT ARBOR NURSERIES
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AMERICAN NURSERYMAN

[Reg. U. S. Pat. Off.]

The Chief Exponent of the American Nursery Trade
National Journal of Commercial Horticulture

Entered September 6, 1916, at Rochester, N. Y. Post Office as second-class mail matter

WITHOUT OR WITH OFFENSE TO FRIENDS OR FOES, I SKETCH YOUR WORLD EXACTLY AS IT GOES.—BYRON

Vol. XLVII ROCHESTER, N. Y., JUNE 15, 1928 *No. 12*

MAY MODIFY WHITE PINE BLISTER RUST QUARANTINE

F. H. B. Calls Conference in Washington to Consider the Matter

A CONFERENCE is called by the Federal Horticultural Board at the United States Department of Agriculture, Washington, D. C., for June 27, 1928, at 2 p. m., for the purpose of considering the advisability of modifying the requirements governing the interstate movement of five-leafed pines and of currant and gooseberry plants on account of the white pine blister rust.

Fifteen states have been designated by the Secretary of Agriculture as infected with this disease, namely: Connecticut, Idaho, Maine, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, Oregon, Pennsylvania, Rhode Island, Vermont, Washington and Wisconsin. Five-leafed pines originating in these states are not at present allowed to be moved into non-infected states nor from heavily to more lightly infected ones.

European black currant plants, which are especially susceptible to attack by the blister rust and are more likely to carry it than other varieties of currants and gooseberries, are permitted movement interstate only within twelve of the Great Plains and Southern states where five-leafed pines either do not grow or are not of economic importance.

Currant and gooseberry plants other than European black currants may, under the present regulations, be shipped interstate anywhere in the United States except into certain limited blister rust control areas, provided that such movement from the states designated as infected is limited to certain less susceptible varieties moving under special conditions. Those permitted movement from infected states are cultivated red and white currant, mountain currant, and cultivated gooseberry plants, and the conditions under which they may be shipped have included not only late summer inspection of the premises on which they were grown, but also inspection of environs of the Nursery, dormancy and defoliation, dipping in lime sulphur solution, and a limitation of the shipping season to the late fall, winter and early spring months.

Since these regulations were adopted two years ago, scientific investigations have indicated that it may be possible to modify these requirements in some degree without increasing the danger of the distribution of the blister rust to new localities. The conference on June 27 will include discussion of the desirability and safety of the following propsals:

(a) That five-leafed pines be permitted wider movement from the generally infected areas of New York and the New England States into more lightly infected states when they have been raised from seed in a Nursery free of Ribes (currant and gooseberry plants) and further protected against blister rust infection by a Ribes-free zone surrounding the premises.

(b) That Federal permits be issued for the interstate movement of inspected cultivated red and white currants, mountain currants, and cultivated gooseberry plants under the sole requirement that they should be dipped in lime sulphur solution before shipment, discontinuing the present practice of requiring an inspection of the vicinity of the Nursery.

(c) That the shipment of permitted species of currant and gooseberry plants from the infected states be discontinued at an earlier date in the spring than at present so as to make feasible the removal of the dormancy requirement for such spring shipments by limiting the movement of Ribes to the period prior to that in which aeciospores are produced on the pines, and that slightly earlier fall shipment of defoliated plants be allowed.

(d) That the declaration of contents as now required for the shipment of blister rust host plants be eliminated. It is understood that all such packages must meet the conditions of permit and certification required under the quarantine.

Consideration will be given to such other proposed changes as may be presented to the Federal Horticultural Board at this conference.

The desirability of bringing up this subject for full discussion at the present time has been urged by state officials and leading Nurserymen.

It is anticipated that any changes adopted as a result of this conference will be announced in time to become effective for the fall shipping season.

New Scotch Pine Disease

A public hearing to consider the advisability of quarantining New York State on account of the Woodgate rust, a dangerous disease attacking Scotch pine and presumably other hard pines, which has recently been established in various parts of that state, will be held at 3:30 p. m. on June 27, in Washington, D. C., before the Federal Horticultural Board.

The disease, which is apparently both new and dangerous, was first found on Scotch pine at Woodgate, N. Y., and for this reason has been called the Woodgate rust. It is an infection which attacks the host with almost unprecedented virulence. For example, one tree 15 feet high was found by actual count to have over 18,000 galls. The parts of the tree above the galls either die (always, if the trees are young) or, if life continues, "brooms" are produced which dwarf the tree and ruin it for timber. The rust has been proved to have the capacity for spreading directly from tree to tree without the intervention of any alternate host. This peculiarity will probably make it particularly dangerous and difficult to control.

Losses in Wisconsin

Losses in tree stocks of Nurserymen throughout Wisconsin because of unfavorable weather conditions were greater during the past winter than in many years, according to the State Department of Agriculture. The department considers the loss a serious one for the Nursery industry.

The shortage of strawberry plants, caused by an open winter, is more acute than it has been for many years. Frequent freezes and thaws, with little or no snow for protection, has resulted in cutting down the supply of strawberry plants to a point where many Nurserymen are unable to fill their orders. A survey conducted by the department reveals that less than 5 per cent of the Wisconsin growers have plants to spare.

Evergreens of all varieties were hard hit by unfavorable weather of February and March. White pine and arbor vitae in particular suffered severely, according to reports from all parts of the state.

The department pathologists account for this injury by explaining that transpiration of the sap in the needles or leaves took place in response to the warm rays of the sun at a time when the roots were still embedded in frozen ground, and the sap given off in this manner could not be replaced by the roots, and as a result the needles dried up and died.

It was pointed out by these scientists that an evergreen once completely defoliated by an insect, plant disease or any other means such as this type of injury, dies and that trees only partially injured may recover. Usually this recovery, like the growth of the tree, is very slow. The department recommends that where a tree is only partially injured it be saved by stimulating its growth by good cultural practices, including the use of plenty of water, tillage, and a light application of some form of a quick fertilizer.

Rhododendron Suggestion—Russell Harmon, of La Bars' Rhododendron Nurseries suggests that best results with rhododendrons can be aided if Nurserymen in ordering will indicate the use to which the plants are to be put; for the following reasons: R. maximum is found in the lower mountain levels of the rhododendron range (through New York, Pennsylvania, Virginia, West Virginia and the Carolinas) and will give best results in positions of semi-shade; R. catawbiense occurs on higher elevations where there is less shade and is adapted to similarly sunnier situations on home grounds; R. carolinianum is often found on the highest, barest wind swept peaks and will grow in positions of unbroken sunlight and extremely low temperatures.

The A. A. N. convention for 1929 has been practically scheduled for Boston and it has been expected that the 1930 convention may be held in Minneapolis.

DETAILS OF A NATION-WIDE HUNT FOR FINE NUTS

Outlined by Dr. W. C. Deming, Northern Nut Growers Association

Twelve Hundred Persons in Thirty-six States Wrote In—930 Packages of Nuts Received, 1344 Specimens—Literary and Sociological Features, Family Confidences and Words Dating Back to the Time of Spencer and Chaucer

SOME AMELIORATIONS AFFECTING WORK OF THE PRIZE NUT HUNTER

Statistical Summary and Commentary on the 1926-27 Black Walnut Contest

A preliminary report from me, and a report of the final judgment and results of this contest, have already appeared in the **American Nut Journal**. This, then, is really the third, and concluding part of the report on that contest.

Letters were received from 1209 persons from 36 states, the District of Columbia and Canada. Some of them wrote several times. No letters were received from Maine, New Hampshire, Vermont, Colorado, Utah, Nevada, Wyoming, Idaho, Oregon, Montana and the Dakotas.

From a literary, sociological, and other points of view not directly relating to the contest, these letters are interesting and would repay further study. Unusual words, like "boskage" for thicket or woods, "goodies" for kernels, and "poak" for bag, go back to the time of Spencer and Chaucer. There were appeals to the sympathies, hoping for the first prize to "help build the church," or to "pay for my boy's operation." Taking into the family confidences was common. A confiding friendliness was the rule, especially from the southern people.

The number of packages of nuts received was 930, containing specimens from 1229 black walnut trees and 115 other nut trees, a total of 1344 specimens. Of the walnuts, other than the eastern black, there were ten specimens of butternuts, five of the California black walnut, five siebolds, four Persians, three heart nuts, two hybrids and one sinensis.

Of the hickories there were 38 shagbarks, 24 shellbarks, 13 pecans, 4 pignuts, 2 mockernuts, one probably a buckleyi, and one hybrid. There were two filberts, some post oak acorns and one package of prunes. All of the nuts received have been tabulated by states.

The number of persons who wrote that they had sent, or were sending, specimens, but of which I have no record of receipt, was 28. Several came without name or address of sender but all of these were identified, in some way or other except four. Deducting these four from the 28 leaves 24 reported sent but not received. Some of these may never have been sent, some may have been faults in my records, but most of them probably were lost in the mail. Many packages were received in such bad condition that I got them only by the grace of the postman. Sometimes the nuts were half gone and one package was entirely empty. Now and then a package may have failed to pass through the hands of somebody very fond of black walnuts. Twenty-three per cent of these failures were women and 20 per cent men.

The number of persons who wrote letters of inquiry about the contest, but of the receipt of nuts from whom I have no record, was 253. This is to me an extraordinary and almost inexplicable thing. I sent every one of these correspondents the contest circular, also bulletin No. 6 and the circular of the association. Why such a large number of persons should have the interest to write letters of inquiry, and then fail to send nuts, is almost beyond my comprehension. Of course there were a number who only wanted to sell nuts or kernels or young trees or trees for timber. But there remains a large number of correspondents who did not respond to our invitation to send nuts. It almost seems as if there might have been something lacking in the form of our invitation.

Some light is thrown on this problem when we consider by states the percentage of correspondents who failed to send nuts. It was much greater in the case of the southern states. For instance out of 119 writers from Tennessee 59, or about exactly 50% failed to send nuts. Whereas out of 133 writers from Ohio only 11%, out of 123 from Illinois only 10%, and out of 22 writers from Iowa only 4½%, failed. This held good for the other states. In a general way the further south the larger to percentage of failure. Georgia 40%, Alabama 35%, Mississippi 33%, Kentucky, 29%, Arkansas 25%, Virginia 23%, Pennsylvania 20%, West Virginia 19%, Missouri 16%, South Carolina 14%, Indiana 13%, Michigan 7%, Maryland, 6%.

Of the 1209 writers 460, or 38%, were

DR. WILLIAM C. DEMING, Hartford, Conn.

women. There was a slight preponderance of women writers from the southern states.

Of the 1229 black walnut specimens received 253, or 20% were set aside for further consideration. These 253 were further reduced to 87 and submitted to the judging committee which reduced them to 40. The 40 were tested by Mr. Bixby's methods and prizes were awarded to 23, a little less than 2% of the total number received. It was a difficult matter to reach this conclusion and there can be no doubt that a number of nuts with valuable characteristics received no prize. I should say that nearly all the nuts reserved for consideration, viz., 253, deserve honorable mention and a list of them should be published. Mr. Bixby thinks a copy of the full report of the contest should be sent to all contestants.

Ohio took 6 prizes, Illinois and Iowa 4 each, Kentucky 3, Virginia and Indiana 2 each, North Carolina and Pennsylvania 1 each.

Iowa was far ahead in the percentage of nuts receiving consideration, by my standards, and in the percentages of prizes won, although the number of specimens sent was small. Of 27 specimens from Iowa 16, or 59%, recived consideration. and 4, or 15% prizes. Of 162 specimens from Ohio 45, or 28%, had consideration, and 6, or 3.7%, took prizes. Of 157 specimens from Illinois 30, or 19%, had consideration and 4, or 2.5%, took prizes. Similar figures for the other prize winning states are: Indiana, 96 specimens, 22, or 23% consideration and 2, or 2% prizes; North Carolina, 81 specimens, 13, or 16% consideration and 1, or 1.2% prizes; Virginia, 97 specimens, 20, or 20% consideration and 2, or 2% prizes; Kentucky, 60 specimens, 11, or 18% consideration and 3 or 5% prizes; Pennsylvania, 74 specimens, 14, or 19% consideration, 1, or 1.3% prizes.

The noteworthy fact is the marked predominance of Iowa in the percentage of nuts getting consideration and winning prizes according to our standards. Kentucky, Ohio, Illinois, Indiana and Virginia and North Carolina followed Iowa in that order. Missouri Mississippi, Alabama, Maryland, Georgia, West Virginia and South Carolina, although sending many specimens, won no prizes. Delaware sent only three specimens. Mr. Bixby thinks that the work of Mr. Snyder and Mr. Dennis educated the people of Iowa to know good nuts.

For future contests we should determine some simple tests of merit that can be quickly applied for the preliminary elimination, for, of course, Mr. Bixby's time-consuming scientific tests and mathematical calculations are out of the question except for a small number of final selections. I ask the suggestions of the convention as to what these preliminary tests should be. Those that I had in mind and used were as follows:

It has become evident that black walnuts are to be judged on their merits for cracking by machinery. Therefore **form** and **color** of nut are of little importance.

Size—Nuts can hardly be too large if there is little sacrifice of proportion of kernel. Great size of nut may sometimes go with lack of tree productiveness, but one can tell very little about productiveness in judging nuts sent to a contest. Statements of contestants in regard to this all important character are probably of little value. On the other hand nuts much below medium size are usually undesirable as entailing too much labor in handling. There may be occasional exceptions to this rule, as in the case of the peanut walnuts.

Husking—I counted it against a nut if it had much, and especially a powdery, husk adhering. Perhaps I became unduly prejudiced from the many attacks of sneezing that I got from inhaling this sternutatory dust. Also it was impossible to keep the dust from soiling the kernels and making them very unattractive. If husks can be readily removed by machinery then this fault is not one of much consequence, from a commercial point of view.

Thickness of shell—If not a much sacrifice of proportion of kernel, will not be a serious fault when nuts are cracked by machinery. Other things being equal. however, the thinner shell the better. I think that I attached too much importance to thickness of shell in my preliminary examination.

Cracking quality—This I considered of paramount importance, or rather of equal importance with the factor of a good kernel. We must have a good kernel and we must be able to get it out fairly easily in large pieces. Large, thickshelled nuts are not necessarily poor crackers. Small, thickshelled nuts usually are. Thin shelled nuts are not necessarily, but usually are, good crackers. Of course, the single kernelled nuts, like the Stabler imperfect form, are the best crackers. We have several of this type, or of the peanut type, and everything possible should be done to develop them on account of this very great merit. Many nuts are excellent crackers with a machine that would give no indication of it when cracked by the hammer. In fact the introduction of the cracking machine has made it possible to crack the average run of black walnuts very satisfactorily and its use should be encouraged in order to make available the nuts produced in abundance by native trees. (The cracking machine has possibly made less urgent the need for improved varieties).

Nuts in which the kernel is slightly shrunken, like those with a hard, sweet kernel, are often almost perfect crackers. The very full, oily, tender, rich kernels are

sometimes hard to extract even when the shell cracks well, and these kernels often shatter badly, which I judged to be a rather serious defect. Perhaps a little longer curing would make these very desirable kernels less likely to shatter.

At first I tried cracking with a hammer in different ways and with various accessory devices. I soon found that the labor was too great and the results unsatisfactory. The commercial development of the black walnut must be considered in connection with machine cracking. After breaking two early models of the Clark Nut Buster I found the third model entirely satisfactory. I am satisfied that this works on the right principle of bursting the nuts by pressure exerted through its bipolar axis, with hollowed anvil and plunger, instead of crushing it or splitting it in halves or quarters, as with a hammer.

Color of Kernel—This resides in the pellicle. The flesh of all black walnuts, properly cured, is white, or creamy white, beneath the pellicle, I believe. Kernels may be blanched as almonds are blanched, and are very attractive. A few nuts appear to be quite, or almost, self blanching, the pellicle adhering to the shell or being easily rubbed off. Apparently, also, freezing loosens the pellicle but also damages the appearance and quality of the flesh, giving it a water cored look and a tough and impaired quality.

Generally speaking the very light, almost white, kernels are much more attractive and of better and milder quality, although some of the nuts, especially those from the south, have a rich, brown color and very high quality. But color and quality seem to depend a good deal on the proper curing of the nut. This was recognized by many correspondents who apologized for the neglect. Nuts not cured and hulled promptly have the color and quantity of the kernels markedly impaired. Future commercial development of the black walnut must take its proper curing very much into account.

Quality and Flavor—These depend, as already said, much on the curing. The strong taste, that so many object to, depends, partly at least on this. The kernel of a properly cured black walnut is a thing that one gets fond of and I often ate more than I needed when I was cracking some of the good ones. I found that some of my friends, previously unacquainted with the nut, rapidly developed appreciation, and increased demand, for the kernels. Richness and tenderness depend on the proportion of fixed oil, and I think that flavor is also bound up with this. If flavor depends on a volatile oil held in the fixed oil it may be that a determination of the percentage of fixed oil will be found to be a fairly accurate way of determining the quality of a nut.

There are two distinct types of black walnut, as regards quality of kernel, just as there are for the Persian walnut, as shown by Howard Spence of England. These two types merge into one another. At one extreme is the rich, oily, tender kernel, at the other the dry, tough, sweet kernel. The sweet type appears to be much more common in nuts grown in northern regions, to be due to deficiency of oil, probably due to lack of heat or shortness of growing season, perhaps varying from year to year. Some of the sweet nuts are fairly good and, I think, always lack the strong black walnut flavor.

Nuts a year old or older, generally have a slightly rancid or a soapy taste. There is probably a difference in different nuts in regard to keeping quality, perhaps depending partly on the curing.

As said before I hope that members and others will express their opinions as to the relative importance of the various factors that I have mentioned, and any others, in the preliminary, and in the final, judging of black walnuts.

The very important factors of productiveness, vigor of trees, climatic and soil adaptation and self fertility or self sterility, we can tell very little about until time has given us opportunity for observation and testing.

Dr. Morris will be glad to learn that one boy wrote that he was a scout and one girl that she was a Camp Fire Girl. Unfortunately neither of them took a prize. Apparently very few boys or girls were contestants, only 11 boys and two girls who gave their ages. Perhaps some of the others were in the same class but did not say so.

The smallest nut, not much larger than a good sized filbert, came from Winnebago, Minnesota. I think it was this one that I judged to be small enough, thinshelled enough and good enough to crack at table with a small cracker. The largest nut came from Charlotte, N. C. One from Texas and another from Arkansas had the thickest shells and the thinnest shelled nut came from Ohio and won a prize. The largest thin-shelled nut came from Springfield, Ill., and the nut with the largest kernel came from Goodlettsville, Tenn. The worst nut came from Deport, Texas.

Five or more sent three-cornered, three-lobed nuts, some saying that all of the nuts on the tree, others that half of them, were of this type. This appears to be a disadvantage rather than an advantage. Two specimens of square nuts were received but apparently they had two-lobed kernels. They were of no special value.

Mrs. Lucy Pierce, Batavia, O., sent nuts of the Stabler type with the statement that about half the nuts are one-lobed. This nut was not considered for a prize as all of the kernels were shriveled in the nuts of that season. Those of the previous season were well filled. This tree should be further observed. Mr. Weber has visited it and can tell us more about it.

Ralph Throp, Greensburg, Ind., won third prize with a peanut type of nut and writes that all the nuts on the tree are of this type. They were nuts of the previous season and somewhat spoiled.

These two nuts, and the first reported peanut-walnut come from the same territory within 150 miles of one another and between 39° and 39° 30" M. lat. The Stabler comes from Maryland. Search in their neighborhood might be rewarded by finding others of this interesting and valuable type.

From Louisville, Tenn., came some kernels one of which had apparently been taken from a nut with one lobe.

One man reported that his trees are dwarfs.

One woman reported that her tree forks two feet from the ground and the two halves bear different nuts. Those that she sent were different. She says that the tree is not grafted.

Two senders report that their seedling trees bear at three years of age.

Two growers report that their trees bear fifty bushels each.

One man reports that the seed of the parent of his tree was brought from Africa.

A woman in Darlington, S. C., sent a large, round, thin-shelled, rather porly filled nut which she thinks is a hybrid of the pecan and the Japanese walnut. It appears to be a pure pecan.

Several foresters and county agents sent nuts or wrote of interest in the contest.

One lady asked for first prize just for telling us that the way to crack black walnuts is to hit them on the end with a hammer.

One man reports a lot of Royal walnut seedlings.

A. M. Jones sent hulls only to let us know what big walnuts he has.

A large proportion of senders said that the nuts were not as large as usual on account of the weather being too dry, or too wet, or the trees being over loaded. This shows the same human attribute that makes our hostess affirm that she "didn't have good luck with her biscuits this time."

Many reported their trees as annual bearers, some as alternating light and heavy crops, some as bearing only every other year.

The number of those who sent nuts all or most of which were hopelessly spoiled or entirely false was surprisingly large. Some of these were explained by the kernels spoiling or completely shrinking after being sent. One specimen set aside for consideration was shrunken to worthlessness on later examination.

A few correspondents showed an intelligent interest in nut culture, but most of them were simply after a prize.

Several senders mentioned the fondness of hogs for the walnuts.

The names of some of the towns arrested the attention. Names like Birdseye, Weeping Water, Spirit Lake, Broken Bow, Flowery Branch, Pizarro, Echeconnee, Red Bird, Sleepy Eye, Mouth of Wilson and Laurel Bloomery must have stories.

But when it comes to names of people, Io, Davis led all the rest, and there were fourteen of them.

Several persons sent specimens of nuts already being propagated such as Stabler and Thomas, but did not say anything about it.

Six nuts, black walnuts and hickory nuts, that took prizes at the Buck's County fair, were sent in but were not considered worthy of consideration.

When the packages of nuts were piling in and almost swamping my limited quarters it seemed as if we must be getting a comprehensive representation from all the trees in the United States. But when one considers that I got only one nut from Connecticut, although there are probably 200 trees in the city of Hartford alone, and thousands in the state, and that it is a poor state for black walnuts, and if the same proportion holds good for the black walnut states of the south and west, one realizes what an inconsiderable representation of the millions of trees of the country the contest brought out.

Such contests should be many times repeated for black walnuts and other nuts, if we are to find many of the best ones, but they mean a great deal of work.

Dr. Morris says that the shagbark hickory was the only kind of nut that brought forth expressions of tenderness of feeling. But many simple southern people love their black walnut trees. They refer to them with tenderness. As, for instance, "the tree that mother brought from the old place and always took care of," or, "the tree that grandfather planted the year that Lincoln was assassinated," or "the tree that we always sell enough kernels from to pay for the children's school outfit."

How to dispose of the rejected nuts was a problem. I gave some to the janitor, sent as many as they would take to the Cripled Children's Home. Most of the local stores had no use for them, but I finally found one grocer who makes something of a specialty of nuts who took over twenty bushels, some at four and some at five cents a pound. He told me that he could sell them only to southerners, westerners and negroes who were familiar with them. New Englanders generally hardly know what the nuts are, although the tree is fairly common as a shade tree in Southern New England. They are seldom gathered except by the squirrels, and the nuts are often small. However, I know trees in Conecticut that bear large nuts. The biggest black walnut tree I ever saw is near South Norwalk, and the biggest crop I ever saw was on a tree in a lane near my former home. There are trees bearing fair nuts since I was a small boy in Litchfield near the N. E. corner of the state. But there is a very small demand for black walnut kernels in New England, according to my experience. New England needs education, in this at least.

One old lady said that nuts were like people, no two alike, an apt expression of truths.

Summer Business—One idea that Nurserymen will do well to consider—those who have time and inclination therefor—is advanced by H. Lloyd Haupt who is in charge of the horticultural sales service of the Du Bois Press, Rochester, N. Y. Commenting on the fact that summer expenses which eat into spring profits may be in part at least offset by the sale of horticultural accessories, he suggests special catalogue announcement of fertilizers, tools and machinery, garden furniture and concrete ware for gardens as well as perennial flowering plants, shrubs in wire baskets and potted plants. Attention is directed to opportunity for new illustrations in season if old plates should be discarded.

IDENTIFYING FRUIT TREES IN NURSERY ROW

Further Observations by Dr. J. K. Shaw Before New York Nurserymen

I PRESUME that you all understand that what I have to say concerns fruit tree stocks exclusively, as my contact with the ornamental stock has been entirely one of admiration and enjoyment.

I take it for granted that there is a problem of misnamed trees before the Nurserymen of New York and of other states as well. To revive this problem briefly I would mention the losses that have been experienced by fruit growers who have planted trees not true to name. Competition in fruit growing is becoming more severe as time passes and losses once borne must necessarily be avoided in the future by those who would win in the race. The winning fruit grower of the future cannot afford to plant misnamed trees.

Then there is the loss to Nurserymen through free replacements and satisfying claims for damages from customers. I have no doubt that every Nurseryman before me pays out a substantial amount of good money each year for such purposes. One or two bad cases of substitution may easily ruin a good trade in any fruit section. You must keep your customers satisfied if you are to keep and build up your business.

During the past few years my colleague, Mr. French, and myself have made quite thorough examinations of about 30 Nurseries from New England to Iowa and from Tennessee to Oklahoma. In every one of these we have found variety mixtures often to the great surprise of the owner. I doubt very much if there is a bare half dozen Nurseries in the country that do not have variety mixtures.

How are you to solve this problem and avoid the disappointment and financial loss it involves? Some have tried budding from bearing trees. Our experience in Nurseries who follow this practice more or less leads us to believe that this is not a complete solution. Such Nurseries are a little better than those who do not follow this practice.

It is claimed by some Nurserymen that it is possible to detect these stray trees during the grading and packing process. It is entirely possible to make some progress along this line but I do not believe that it is humanly possible to detect all mixtures from dormant trees. The fact that so many trees not true to name reach the customers is proof that it is not an entire success. Some varietal characteristics are more clearly seen in dormant trees than in those growing in the Nursery but there is much of value for variety identification in the leaves of the growing trees. The best time to identify varieties is in the Nursery from July 1 to the time of leaf fall.

Most Nurserymen who grow considerable numbers of fruit trees have one or more men who know varieties. Many of these men are highly skilled in such work. My suggestion is that you give these men the opportunity to spend a good deal of time going over your Nursery rows during the growing season and encourage them to develop their knowledge of varieties. It is wise to go over the Nursery several times during the growing season. Some mixtures are easily detected at a certain stage of development and others at a different stage of development. I believe that in this and in no other way can this problem be solved. It is cheaper thus to prevent mistakes than to pay for them after they are made.

In general sweet cherries should be studied early in the season followed by sour cherries, plums, pears, apples and lastly peaches, but it is advisable to examine each fruit early in the season and late in the season.

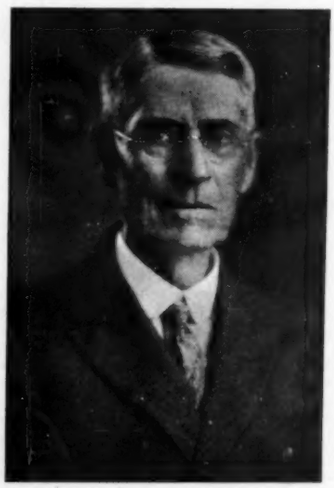
We have found it possible to identify practically all apple varieties in the Nursery row. Except the so-called bud sports. It is practically impossible to tell them from the parent variety. There are some difficult problems among plum varieties but in general they are no more difficult than apple varieties. Pears are comparatively easy of identification. Cherry and peach varieties are difficult but with sufficient study great progress may be made. It is unfortunate that cherry and peach varieties are so hard to identify because they are badly mixed in the Nursery and conversely they are badly mixed because they are hard to identify.

I have said that leaves are of great value identifying varieties and I have found that most Nursery workers do not fully appreciate their value in identification. They place too much emphasis on size and bark color and not enough on leaf characters. Size varies greatly with growing conditions and color characters vary with light conditions and maturity. Both are valuable but are to be considered with considerable caution.

I will now show a few lantern slides most of them showing typical leaves of certain apple varieties and will ask you to note certain characteristics that are very helpful in recognizing varieties. Some of these are as follows: (1) size, (2) shape or outline, (3) the folding or curving of the leaf blade, (4) the texture of the surface caused by the type or form of the small net veins, and (5) the size and form of the serrations on the edge of the leaves. This last is of great value for when the leaf edges of any two varieties are compared they will almost always be unlike. There are other leaf characters not shown in the slides that are helpful. But do not get the idea that variety identification is by leaves alone. Characteristics of growth, bark and bud are equally valuable.

Alabama Nurserymen's Secretary

Dr. F. T. Nye, Irvington, Ala., secretary of the Alabama Nurserymen's Association,



DR. F. T. NYE, Irvington, Ala.

invested in land in Mobile County, Alabama in 1910 and planted a pecan and satsuma orchard, also starting at that date the Pioneer Orchard and Nursery, for the purpose of propagating pecans, satsumas and other citrus fruits, persimmons, etc.

Under the instruction of Prof. Shamel, federal citrus fruit expert of California, advised by other federal fruit experts from the Department of Agriculture in Washington, D. C., he is propagating standardized Owara-type satsuma trees from a mother orchard developed and budded with buds taken from bearing branches on certified record-bearing satsuma trees.

There are fruit crop records of from three to ten or more years. Owing to over work during the World War, being compelled to leave his former home and practice, Beloit, Wis., he is after five years' personal service, greatly pleased and well satisfied with his success in horticulture.

A Nurseryman's Aid

The Arnold Arboretum has announced that it should have a subscription list of fifteen hundred to two thousand if it is to keep up the publication of the illustrated bulletin, as the expense of illustrations is considerable.

The description of the latest and best plant material being sent out by the Arnold Arboretum are written by Dr. Wilson, and make available for the Nurserymen really true and attractive descriptions of these rare plants for use in catalouge work. The photographs, also, are, as a rule, taken by Dr. Wilson himself and duplicates of these cuts are available for Nurserymen who are propagating and sending out this rare plant material.

No live Nurseryman can afford to be without these bulletins, and as the Nurserymen are the ones who more greatly profit from the products of the Arnold Arboretum than any other people in the United States, it is distinctly up to them to back up these publications by subscribing from one to twenty-five copies at the small sum of $1 each for the yearly subscription. It does not seem credible that the Nurserymen would let this publication cease on account of this ridiculously small amount of patronage.

Anyone who has a complete set of the Arnold Arboretum Bulletins has a work of utmost value. He can turn to the index and find a fine description of practically every new and valuable plant growing in the Arboretum today. Now that they are illustrated, the volumes become doubly valuable.

The day of the poor plant description and worse illustrations is done for if one is to really make sales to an increasingly intelligent horticultural public. There are very few who are giving plant descriptions today that equal Dr. Wilson's accuracy and pleasing style. This is all made available to the Nurserymen freely, and all he is asked to do is to get the Bulletins and make use of them.

Let us hope the response to this letter will be worthy of the Nurserymen. The subscriptions at $1 each should be sent direct to the Arnold Arboretum, Jamaica Plain, Massachusetts, for the current year.

HARLAN P. KELSEY

Salem, Mass.

The Filbert's Congenial Home

Editor **American Nurseryman:**

With over 20 consecutive crops, mostly large, to its credit; with 25-year-old trees bearing from 80 to nearly 100 lbs. per tree; with 15-year-old trees bearing from 50 to 60 lbs.; with the actual yield from all our 14-year-old trees of over 3,000 lbs. per acre, we feel justified in the belief that the filbert has at last found a congenial American home in the Pacific Northwest.

With the unanimous verdict of nut connoisseurs all over the nation, to whom samples have been widely distributed, that our filbert is the best nut of its kind they have ever seen, is it too much to hope that the American consumption of home-grown filberts will increase as fast as we can supply the demand and that the Pacific Northwest will eventually become known and famous not only as the filbert producing section of America but as the leading filbert producing section of the world?

That this hope, entertained and expressed 15 years ago, and strengthened with each succeeding year is certain of realization has now become with me a settled conviction.

GEORGE A. DORRIS

Springfield, Ore.

Are you preserving your copies of the AMERICAN NURSERYMAN? They are of unequaled historic value. An index for each volume.

All Shenandoah Invites You

And wants you to plan your trip to the Nurserymen's National Convention at Denver so that you may spend Saturday, June 16th, as guests of the Nurserymen and Seedsmen of Shenandoah.

OUR TOWN PEOPLE EXPECT YOU

And you know that *Ed Welch, Henry Field, Earl May* and the *Lakes* will welcome you cordially and entertain you royally.

Please write to any of the above hosts for full information regarding train schedules and entertainment plans.

SHENANDOAH NURSERIES

A. F. LAKE, Pres. R. S. LAKE, Secy.-Treas.

SHENANDOAH IOWA

Farm Wages in the East

Farm wages in New York are reported as follows: By the month with board furnished additional, $48.00; by the month without board, but usually with house-rent, milk, potatoes and other farm-grown supplies, $69.25; per day with board additional, $2.85; per day without board, $3.60. These wages represent very slight decreases from the wages paid April 1st a year ago. There is considerable local variation in farm wages. They are the highest on Long Island. Expressed as a per cent of normal supply, farm labor is apparently somewhat more readily available than a year ago, the supply being indicated at 94 per cent this year and 85 per cent last April. On the other hand, demand at 87 per cent compares with 88 per cent in April, 1927. The conditions with respect to employment in cities, and the demand for local labor for road building and other work of that nature in rural districts are important factors in the labor supply. Next to the far western states, the wages paid for farm help by the uonth in the North Atlantic staes are he highest of those paid anywhere.—N. Y. State Dept. Agr.

Nurseries as Hospitals—One of the disadvantages of an occupation which is reputed healthy, and esteemed by the public far more profitable than is actually the case, is that Nurserymen are constantly being asked to take in people who are consumptive, half-blind, or in various ways defective, mentally or physically. The applicants overlooking the fact that to be of much use in a Nursery a person should have rather more than the average allowance of muscle, brain, etc., and not less. It is usually assumed that these people will be paid a good wage and that the proprietor or his foreman will devote themselves to his care, whereas the Nurseryman has not the time. These remarks are not of course intended to refer to the legacy of damaged men left by the great war, of whom a fair proportion is to be found in the Nursery and seed trade.—Horticultural Advertiser (British).

New Safety Record

The Association of Railway Executives is asking the Interstate Commerce Commission for more latitude in allotting expenditures for safety equipment. An argument of weight is the new safety record of American railways for 1927. During that year only ten passengers were killed in train accidents. The figure for 1926 was seventy-nine. There were also fewer fatal and other accidents to employes. Of $323,000,000 invested in safeguards during the last eight years, all but $22,000,000 has been expended on the initiative of the railways without orders from the Commission.—Phila. Public Ledger.

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Postal Rate Revision

Postal Bill H. R. 12030 was passed by Congress May 26 and was signed by the President May 29; it becomes effective July 1, 1928. A reduction in postal revenues of $16,285,000 has been made and business mail users benefit materially. Changes made were outlined in a recent issue of this journal.

National Council of Business Mail Users believes that the next Congress will restore 1924 rates on third and fourth class matter.

Paper as a Mulch

Paper of the type used as a mulch in pineapple production in Hawaii has been found to be applicable also to a wide variety of crop plants in the eastern United States, according to Dr. L. H. Flint, physiologist of the United States Department of Agriculture, who has recently completed four years' study of the possibilities of paper mulch and its effect on plant growth. Increased yield and growth have been secured by the use of impervious-paper mulch with such common garden crops as corn, beets, carrots, green beans, squashes, and others. In many instances the yield was from 1½ to 3 times as great as from unmulched crops.

The results of the experimental work are presented in Technical Bulletin 75-T, "Crop-Plant Stimulation with Paper Mulch," just published by the department. On the basis of the plot tests thus far made, the use of paper mulch, says Doctor Flint, in addition to increasing yields, eliminates all weeding between rows, facilitates weeding between plants in the row, and does away with the necessity for cultivation. In certain crops further advantages reported are increased germination which results in greater yields, a marked hastening of maturity, and a superior crop product in point of size, quality, and cleanliness.

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AMERICAN NURSERYMAN

American Nursery Trade Bulletin

CHIEF EXPONENT OF THE AMERICAN NURSERY TRADE

Featuring the Nursery Trade and Planting News of American and foreign activities as they affect American conditions. Fostering individual and associated effort for the advancement of the Nursery and Planting Industry.

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Published Semi-Monthly by
AMERICAN FRUITS PUBLISHING CO., INC.
39 State Street, Rochester, N. Y.

RALPH T. OLCOTT, Pres. and Treas.
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ROCHESTER, N. Y., JUNE 15, 1928

FOUNDER OF AMERICAN NURSERY TRADE JOURNALISM

THE FIRST Nursery trade paper in America was established in 1903, as long-time Nursery concerns know, and for nearly thirteen years was conducted under the personal and exclusive direction of Ralph T. Olcott, of Rochester, N. Y., who later founded the AMERICAN NURSERYMAN on broad and untrammeled lines.

"The dean of Nursery Trade Journalists."—John Watson.

IMPORTANCE OF THE TRADE PRESS

In a recent address to men connected with the press, President Coolidge said:

"Whatever has to do with the collection and transmission of information to the public is of the highest importance. It is gratifying to know that this great service to America is in the hands of men of ability and patriotism.

"There is a universal desire to serve the public in this capacity, not only interestingly, but candidly and helpfully. The fundamental institutions of our government scarcely ever fail to receive cordial support. The moral standards of society are strengthened and the intellectual vigor of the nation is increased and quickened by your constant efforts.

"The press is also an important factor in the commercial and industrial development of our country. It carries an amount of scientific information which stimulates both the production and consumption of all kinds of commodities.

"This service is always on the constructive side of affairs, encouraging men to think better, to do better and to live better. Reaching through it all, there is every assurance that today is better than yesterday, that tomorrow will be a better day than today and that faith is justified."

The "American Nurseryman" is highly indorsed individually and collectively by the American Association of Nurserymen and by more than a score of district and state trade associations in the United States and Canada.

The Mirror of the Trade

AMERICAN SEED FOR STOCKS

In the opinion of those in close touch with the developments in production of American rose and fruit tree seedlings, marked progress has been made in recent years. In the June 1 issue of the American Nurseryman were given opinions by growers of domestic stocks which bear directly upon the conference to be held in Washington, D. C. by the Federal Horticultural Board this month.

An outstanding fact that has come to light recently is that best results in production of American fruit tree stocks have been obtained through the use of American produced seed. This is particularly noticeable in Mahaleb stocks where good stands seem to be the rule if domestic seed is used, while poor stands are encountered when imported seed is used.

VALUE OF SELECTED BUDWOOD

In recent years, a fuller appreciation of the possibility of holding the Valencia orange through the summer and fall, when no other oranges are on the markets, has greatly stimulated increased plantings of this variety in California, and for the last few seasons shipments of Valencias have nearly equalled those of the Washington Navel. The profitableness of the culture of the Valencia in the southwest, however, according to the United States Department of Agriculture, depends upon uniformly high production by the individual trees combined with commercial quality of the crops.

Studies of California orchards have shown them to consist of at least 12 strains of commercial importance, together with a number of others of minor consequence. The investigations, conducted since 1912, have also shown that some trees of the different strains bear limbs that differ in the character of their foliage and fruit from the rest of the tree. The unintentional use of buds from such limb variations for propagating purposes is held responsible for mixed conditions in many Valencia groves.

Some of the data obtained by study of the progeny of these limb variations are presented in Department Bulletin 1483-D, "Bud Selection in the Valencia orange: Progeny Tests of Limb Variations," to show the unstable condition of the Valencia variety and to show also the importance of systematic bud selection in its commercial propagation. A copy of the bulletin may be obtained by writing to the United States Department of Agriculture, Washington, D. C.

ANTEDATING NURSERY WORK

In this issue is presented an interesting account of work antedating that of the Nurseryman, but essential to the development of new varieties. It is the province of the Northern Nut Growers Association to search for native nut trees which offer inducement to the propagator in the hope of producing with the aid of Nature, nuts of higher quality and easier cracking characteristics. It is this work that is of special advantage to the Nurseryman who is glad to profit by the nut association's search. Nurserymen are today propagating finer than native walnuts, filberts, chinquapins, hickory nuts as the direct result of this association's activities.

Dr. W. C. Deming, a prominent member of the association and one of its organizers, outlines in detail what it means to undertake a nation-wide search for Nature's best.

To Sell the Idea

"We want you to see what our committee sees clearly. It is not the kinds of trees and plants that we propose to advertise; the individual Nurserymen will do that. We must aim to sell the idea of planting. The paint manufacturer's big national campaign does not speak of colors and kinds of paints—just 'save the surface'. Demand for the bath tub has been created to such an extent that no house is now built without one! What we likewise need to put over is, for instance, 'No house is complete without a foundation planting.' We must make the home owner garden-conscious."—Chairman E. C. Hilborn, Distribution Committee, A. A. N.

Principles of Business Conduct

[Resolution adopted at the 1928 annual meeting of the Chamber of Commerce of the United States, Washington, D. C.]

The Chamber of Commerce of the United States declares its confidence in the general integrity and sound ideals of modern business. These are brought into high relief by recent disclosures of individual violation of established business practices.

American business is jealous of its good name, insists upon protecting its professional status by the maintenance of the highest standards, and intends scrupulously to discharge its collective responsibilities.

Chief among such responsibilities is that of purging business of all those who indulge in commercial and political corruption and through resort of unclean or unworthy practices bring business into disrepute and shock the sensibilities of all decent citizens.

The Chamber declares that the moral turpitude of corrupters of public servants is even greater than that of those whom they debauch.

The Chamber emphasizes its principles of business conduct which provides that "corporate forms do not absolve from or alter the moral obligations of individuals." It maintains that stockholders of corporations owe it to themselves, to the government, and to the profession of business publicly to repudiate those who misrepresent them. Such stockholders cannot accept the profits flowing from corruption and escape the moral stigma which inheres in such profits. Neither can they permit those who act for them to profit personally through corrupt corporate transactions, or shield others who do.

The Chamber reaffirms its allegiance to the principles of business conduct adopted at its annual meeting in 1924 and particularly does it reaffirm the principle that "business should render restrictive legislation unnecessary through so conducting itself as to deserve and inspire public confidence."

AMERICAN FRUITS

[Reg. U. S. Pat. Off.]

If Western New York is to maintain its renown as one of the country's greatest fruit belts, it must find means at once of coping with the keen competition of other regions, the changing consumer demand and increased cost of production, M. C. Burritt of Hilton, president of the New York State Horticultural Society, told members of the Community Council of the Rochester Chamber of Commerce recently. Mr. Burritt supplied accurate data showing the decrease of fruit production in this locality and urged that there be true recognition of the existing state of affairs.

Nurserymen are directly interested in activities to improve orcharding conditions with consequent increase in planting. Conditions in various orchard sections of the country may be similar in character to those confronting New York State growers.

In 1925 Western New York had 4,800,000 bearing apple trees and 944,000 young and non-bearing trees. That number is 800,000 less than the total in 1890. Mr. Burritt's answer to the problem presented by the decrease is that plantings have not been kept up.

Plums and prunes produced commercially are practically gone from this section, he said. They are now grown only for local markets. Where the region formerly produced 6,000 carloads of peaches, it now produces 1,000 carloads. The pear production, too, is apparently going, he pointed out, because pear tree plantings are not being kept up.

Organized competition in the Shenandoah-Cumberland region and the state of Washington districts is now a big factor for this section to overcome, Mr. Burritt said.

On the bright side of the picture there are two main advantages to be taken into account. There is a great diversification of industry in this fruit belt. Not only is fruit grown, but grain, canning crops, dairy products, poultry, etc. This makes for cheaper production and varied sources of income. Nearness to market by reason of excellent transportation facilities is an advantage of major importance.

"The answer to the question is this," said Mr. Burritt. "Soil, climate, markets and people formerly made Western New York one of the greatest fruit regions in the world. Those advantages can maintain for the region its supremacy, provided there is found a means of coping with certain existing conditions. The conditions that must be met are: Competition from other regions, a factor that involves organized effort, cooperative marketing and alertness to the situation; changing consumer demand, inasmuch as the demand has turned to citrus fruits and fresh vegetables; and increased cost of production."

A Mail Order Result

A Howard Lake lady ordered some Nursery stock from Sears, Roebuck & Co. of Minneapolis and was surprised indeed when the order was delivered by the Eddy Nursery, located in Howard Lake and only a few blocks away from the lady that sent to the mail order house for the goods. The Eddy's furnish Nursery stock for the mail order house.—Waverly, Minn., Star.

Ready To Supply Stocks

Editor American Nurseryman:

We believe that in case it should be decided to put the quartantine into effect the Northwest can do fully its share in supplying the needs in the way of fruit tree seedlings and rose stocks; in fact, in anticipation of the probability of the embargo, we have ben for several years growing more than we could sell and have finally reduced our plantings as the eastern Nurserymen can buy the imported stocks cheaper than we can afford to grow them, and undoubtedly will continue to do so as long as they can ship them in. But if we can know positively, a year or two in advance, that the embargo will be placed at a definite time the plantings here will be increased to such an extent that we believe there would be no shortage.

The writer visited the seedling blocks in the Yakima Valley last Friday and Saturday and for the most part found them in very good condition.

PORTLAND WHOLESALE NURSERY CO.
Portland, Ore., May 28.

Conditions in Virginia

Editor American Nurseryman:

Business has been good with us this spring. We have booked several large orders for pink and white flowering dogwood for spring of 1929 delivery. Rhododendrons have moved well and orders are rolling in for fall delivery. These plants are collected and Nursery grown and will soon be a thing of the past in the mountain sections as we look for restrictions by the government in the digging of them as good plants are very fast disappearing. However, we are booking several orders to go out in August and September. Pyramidalis and American arborvitae are moving well. In some sections the severe frost damaged these plants to some extent. Orders for these evergreens are coming in for fall and spring shipment. Shade trees have sold well and some varieties are scarce. We have booked several orders for Norway, Sugar Silver and Sycamore maples. Shrubs are not selling well.

E. W. JONES NURSERY CO.
Per J. W. Jones, Sec.-Treas.
Woodlawn, Va.

To Boost South Dakota—The secretary of agriculture of South Dakota, Louis N. Crill, will isend during the next 20 weeks to the press of the country 25 articles descriptive of the natural resources and agricultural importance of the state. Results of this publicity should be of advantage to Nurserymen who will be called upon to supply material for planting.

400 Bags a Day

Two Geneva, N. Y., Nurseries held the record of shipping through that post office some 400 bags of mail a day during the Nursery shipping season which is just closing.

VALUABLE REPRINTS

Of Articles Appearing in the Columns of the "American Nurseryman."

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"Sales Management and Business"—The star address of the Midwinter Convention Season—By H. N. Tolles, Chicago.

Heavy Losses Follow Late Stratification of Plum and Cherry Seeds—By C. F. Swingle, Junior Pomologist, U. S. D. A.

Pleasant Fields of Personal Work With Plants; Craftsmanship vs. Standardization—By Dr. L. H. Bailey, Noted Horticulturist.

How to Make Salesman Out of Raw Material—By E. H. Smith, Vice-Pres. Harrison Nursery Co., York, Neb.

TRANSPORTATION

Fifty years from now the railroads will still be performing the bulk of our transportation service, particularly in freight, in the opinion of Samuel Rea, retired president, Pennsylvania Railroad. "In so far as the railroads themselves are concerned the progress of the next fifty years seems likely to be more a matter of orderly development than of radical change. This is not surprising in view of the fact that the railroads today represent the evolution of a full century of cumulative knowledge and experience. In the way of further improvements and betterments along lines already understood, however, there are almost unlimited possibilities, and the question how far we will be able to go in giving the country better railroads in the next half century is chiefly a question of what the railroads will be allowed to earn."

—

Class I railroads in 1927 had a net railway operating income of $1,085,485,000 which was a return of 4.40 per cent on their property investment, according to reports just filed by the carriers with the Bureau of Railway Economics. Their net railway operating income in 1926 was $1,233,048,000 or 5.13 per cent on their property investment.

—

The progress of the American railroad system, since it was turned back by the government after the war, has been one of the outstanding achievements and most important favorable factors in business within recent years," according to Craig B. Hazelwood, Vice-President, Union Trust Company of Chicago.

—

The freight shippers of America paid in 1927 almost nine hundred million dollars less charges than they would have paid in 1921 for the same service. Numerous rate reductions have saved the shippers over four billion dollars in the six years.

Ornamentalists vs. Fruit Men

Says Thomas R. Thompson in Western Florist: It is rumored that among other things a terrific battle will be staged between ornamentals and fruit tree men prior to the American Association of Nurserymen convention which will be held in Denver June 20, 21, and 22.

The battle, however, if it takes place, will be bloodless, for the ammunition will consist of snowballs. The scene of the conflict will be 10,000 feet above sea level, and fifty miles from Denver.

The Western and Rocky Mountain Association will act as joint hosts prior to and during the convention. The arrangement committee consists of President Walter W. Hillenmeyer, Lloyd Stark, W. S. Griesa, Chairman, John T. Roberts, Jr., and Carlisle Ferguson. The last two are Denver Nurserymen and members of the Rocky Mountain association.

COMING EVENTS

American Association of Nurserymen—Annual convention, Denver, Colo., June 17-22.

Connecticut Nurserymen's Association—Summer meeting, July, at Lake Compounce.

Pacific Coast Association of Nurserymen—Annual convention, Seattle, Wash., July 11-13.

American Peony Society—Annual show, Horticultural Hall, Boston, Mass., June 22-24.

American Seed Trade Association—Annual convention, Hotel Stevens, Chicago, June 27-29.

American Dahlia Society—Annual exhibition, Madison Square Garden, New York, Sept. 26-27.

American Gladiodus Society—Annual meeting, Toledo, O., Aug. 16-17.

Toronto Horticultural Society—Annual flower show, Exhibition Park, June 20-21.

Federal Hort. Bd. Hearing—On Seedling embargo, Washington, D. C., June 27.

EFFECT OF DIFFERENT MEDIA ON ROOTING CUTTINGS

By L. C. Chadwick, Cornell University, Before N. Y. State Nurserymen

I WISH to state briefly the nature of the investigational work with cuttings that we are doing at Cornell. For the most part three types of experiments have been followed:

1—The use of chemical compounds as stimulating agents.

2—The position of the cut as related to the rooting ability of the cutting.

3—The influence of different media on root formation.

I would like to mention just a few points in connection with the first two types before discussing the third as the main subject of my talk.

Use of Chemical Compounds—Considerable stimulation can be obtained by soaking deciduous or evergreen cuttings in solutions of potassium permanganate ($KMnO_4$) or ordinary cane sugar ($C_{12}H_{22}O_{11}$). Ordinarily, potassium permanganate will give greater stimulation than cane sugar; however, with softwood cuttings, sugar will prove nearly as good The method of soaking cuttings in solutions of these chemicals is not adapted to commercial scale propagation, so until we can develop a method of treatment that can be used conveniently and successfully by your Nurserymen who are handling large numbers of cuttings, I do not feel that it is very important. We are working on a method now that we hope will be successful.

Position of the Cut—I presume that with 90% of all the cuttings that are made, the cut is made directly at the node or eye. Last summer I attempted to test out the position of the cut with about one hundred different kinds of plants. Cuts were made, 1, at the node, in the usual way, 2, ¼"-½" above the node, and 3, ¼"-½" below the node. Surprising and fairly significant results were obtained on about sixty of these plants. Judging from the percentage rooted, the amount of roots and the position of the roots, I feel safe in saying that at least 50% of these will root just as good, if not better, when the cut is made ¼"-½" below the node. With some of the shrubs especially those having short internodes, as most of the spireas, it will make very little difference whether the cut is made at, above or below the node. Forsythia suspensa, Kerria japonica, Philadelphus coronaria, Physocarpos opulifolius and viburnums, especially carlesi, the fragrant variety, are among those that have given better results when the cut was made below the node.

Media—Until a few years ago sand was almost universally used as a rooting medium for cuttings. In my research work in endeavoring to stimulate root formation, I have been using considerable granulated peat moss. Some very interesting and important results have been found. In running tests on media, three types have been used; 1, sand; 2, peat, and 3, a mixture of equal parts of sand and peat. The difference in media does not seem to play quite as important a part with deciduous cuttings as with evergreens; however, the difference is considerable in some cases.

Ilex verticillata will root better in peat or the mixture of sand and peat than in sand. Peat seems to give slightly the best results in most cases. A few figures will show this condition:

Ilex verticillata. Cuttings taken 11/21/25

Media	% Rooted.	Av. total length of roots per cutting rooted. Millimeters	Inches	No. of roots per cutting
Sand	40.0	27.0	1.1	3.8
Sand & Peat	45.0	34.2	1.3	4.1
Peat	65.0	49.6	2.0	4.6

Ligustrum vulgare (English privet) has given the opposite results; peat seems to be toxic to this plant. However, equal parts of sand and peat will give in most cases at least as good, if not better, results than sand.

Ligustrum vulgare. Cuttings taken 7/14/26.

Media	% Rooted.	Av. total length of roots per cutting rooted. Millimeters.	Inches	No. of roots per cutting
Sand	86.0	287.8	11.3	6.5
Sand & Peat	71.0	332.0	13.1	6.3
Peat	30.0	181.4	7.1	7.7
Cuttings taken 11/22/25				
Sand	55.0	51.4	2.0	3.4
Sand & Peat	60.0	55.6	2.2	4.1
Peat	15.0	8.7	.34	2.0

The influence of different media on the rooting ability of softwood deciduous cuttings is also shown in the following table:

	Percentage rooted		
	Sand	Sand and Peat	Peat
Deutzia gracilis	90	80	40
Euonymus alatus	100	90	0
Kerria japonica	80	100	60
Lonicera tatarica	70	60	0
Philadelphus coronaria	90	100	100
Prunus trichostyla sinensis.	60	70	80
Stephanandra flexuosa	100	100	90
Viburnum carlesi	20	100	90
Viburnum dentatum	70	30	100
Weigela sp.	90	100	70

Judging not only by the percentage rooted, but also by the amount of roots, we can classify the above plants as follows: those rooting best in sand are Deutzia gracilis, Euonymus alatus and Lonicera tatarica. Kerria japonica, Philadelphus coronaria, Prunus trichostyla sinensis, Stephanandra flexuosa and Weigela will give as good, if not better, results in the mixture of sand and peat as sand. Viburnum carlesi and dentatum have given better results in peat.

In most cases with deciduous softwood cuttings where there has been an increased rooting ability in sand and peat or peat, the difference over sand is not great enough to pay for the extra expense. However, with some plants as Ilex verticillata and the two Viburnums listed, the value of peat has already been determined and I feel that others will be found where mixtures of sand and peat or peat will surely pay.

More significant results have been obtained with evergreen cuttings, as the following tables will show.

Taxus cuspidata. Cuttings taken 7/14/26

Media	% rooted	Av. total length of roots per cutting rooted Millimeters	Inches	No. of roots per cutting rooted
Sand	60	13.5	.53	2.7
Sand & Peat	50	157.6	6.2	7.6
Peat	90	194.4	7.7	7.3
Cuttings taken 10/30/26				
Sand	40	140.0	5.5	5.4
Sand & Peat	8	41.8	1.6	1.5
Peat	92	301.5	11.9	5.5
Thuja occidentalis wareana. Cuttings taken 10/28/26				
Sand	28	199.0	7.8	3.1
Sand & Peat	24	403.7	15.9	4.1
Peat	68	332.0	13.1	4.4

These figures show that peat is certainly a good medium for evergreen cuttings. Taxus and Thuja root much better in peat than in sand. With Taxus, very poor results have been received with the mixture of equal parts of sand and peat. This has also been the tendency with some of the others but not to the same extent. It has been reported that generally peat was toxic to Arborvitae cuttings. This certainly does not seem to be the case with Thuja occidentalis wareana. The results with the mixture of sand and peat in this case were about half way between sand and peat where it would naturally be expected. It should be mentioned that the roots of the cuttings of Taxus and Thuja in peat are far superior to those rooted in sand; there are more fibrous roots and not anywhere near as brittle, which would seem to be a very important point in potting, especially with Taxus, as with this plant the roots are usually very brittle.

Abies concolor will root 80-100% in peat in three or four months when the cuttings are taken in February. They rooted very poorly in sand and not much better in sand and peat at that time.

Juniperus horizontalis douglasi, Juniperus excelsa stricta and Chamaecyparis nootkatensis, while the percentage of rooting of those that I have tried has been below the average, they also seem to root better in peat than sand.

I feel that peat can be used very advantageously as a rooting medium for evergreen cuttings. Whether various varieties will root better in sand, sand and peat or peat can be determined only by a number of tests. Such work we hope to continue at Cornell. We are glad to receive suggestions from any of you Nurserymen who have had much experience in the propagation work, and if there is any special plant you would like to have us try, please let us know and we will be glad to do what we can.

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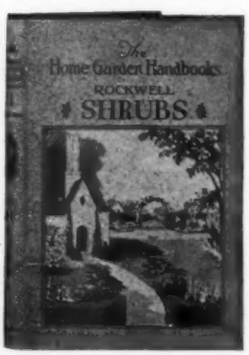

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Andrews LATHAM Raspberry

OUTSTANDING IN YIELD and HARDINESS
MOSAIC-FREE STOCK—RELIABLE
ANDREWS NURSERY CO., Faribault, Minn.

THIS PAGE PRESENTS

American Nurseryman Directory of American Plant Propagators

Listing Nursery Concerns Which Specialize in Production of Young Stock Including That Which Has Heretofore Been Imported

The American Plant Propagators' Association, Organized in 1919, Will Hold its Tenth Annual Meeting in Denver, Colo., June 20, 1928. E. M. Jenkins, Winona, Ohio, Secretary

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GOOD ASSORTMENT
STANDARD SORTS
Price List on Request—Established 1871
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FOR LINING OUT
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"Hardy New England Grown"

American Nurseryman Directory of American Plant Propagators

Listing Nursery Concerns Which Specialize in Production of Young Stock, Including That Which Has Heretofore Been Imported

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Unusually bushy, recently transplanted heavy rooted stock. Northern grown—splendid values.

Quality	Height	Each	10	100
3 times trans. B&B,	2 to 3 ft.	$3.00	$27.50	$250.00
3 times trans. B&B,	18 to 24 in.	2.25	20.00	175.00
3 times trans. B&B,	12 to 18 in.	1.50	12.50	100.00

Quality	Height	10	100	1000
twice trans.	18 to 24 in.	$12.00	$100.00	$800.00
twice trans.	12 to 18 in.	9.00	60.00	500.00
twice trans.	8 to 12 in.	5.00	35.00	300.00

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We can save you real money whether you need large or small quantities.
BEDFORD HILLS NURSERIES
BEDFORD HILLS, N. Y.

Nursery Trade Bulletin

It is estimated that 3,000 acres will be planted to pecan trees in Arkansas this year.

Fire last month caused $40,000 loss in Albert Campbell's Nursery and greenhouses, Paw Paw, Mich.

Boston Chamber of Commerce invites the American Association to hold its 1929 convention in Boston.

The partnership of M. F. Helmes and C. S. Copeland, Cary, N. C., under the firm name of Cary Nursery has been dissolved.

One of the best known and oldest Nurseries in Montana, is that of Charles Dahlman's Missoula Nursery Co., established 39 years ago.

American Landscape School, Newark, N. Y., conducted for years by the late Mr. and Mrs. Warren, has been sold to Frances A. Robinson, Des Moines, Ia.

Nicholas Verburg, general manager of Willadean Nurseries, Sparta, Ky., will spend the summer in Boskoop, Holland.

C. B. Miller and S. A. Miller, of the Milton Nursery Co., Milton, Ore., are on their annual business trips east. They expect to attend the Denver A. A. N. convention.

Henry Penn, chairman of the national publicity committee of the S. A. F. says: "Without local advertising national advertising

Ellis Nursery, Santa Rosa, Cal., plans to concentrate on local trade, eliminating the middle man.

Kramer Brothers Nurseries, Ontario, Cal., have a new location adjoining the Red Hill Country Club at Uplands, Cal., where on a 53-acre tract they are specializing in deciduous trees, figs, avocadoes, shrubs and heather.

T. J. Dinsmore, Troy, O., died recently at the Cleveland Clinic Hospital. For 20 years he was in the Nursery business and was associated with the Farmers Nursery Co., Troy, O., until three years ago. His business will be continued by his son, T. Robert Dinsmore.

M'ssissippi Nurserymen's Association has been formed with S. A. Bouslog, Gulfport, president; M. B. Allen, Lilydale, secretary. Among the members are James Brodie, Sr., and James Brodie, Jr., of Biloxi Nursery; Adams Nursery, Pass Christian; Cox Nursery, Gulfport.

The Reh Nurseries, Inc., is the name of a new concern recently incorporated at Monroe, Mich. It will engage in a general plant Nursery. The capital stock is $80,000. The stockholders are Wallace J. Duey and Wilbur W. Reh, 608 O'Brien street, Monroe, and William Moorhead, 3711 Webb avenue, Detroit.

AIDS FOR LOCAL PUBLICITY

Inquiry was made last month of the **American Nurseryman** for suggestions as to effective matter to be used in a local newspaper for the purpose of stimulating local planting of Nursery stock.

From time to time sample articles of this kind have appeared in this journal. Not long ago we quoted an editorial which appeared in the Albany, Ga., Herald directing the attention of readers of that paper to the fine appearance of a mimosa tree in a yard in the residence section of Albany. Presumably readers of the Herald upon reading the article take the first opportunity to view the particular tree described; and, of course, desire to plant such a tree would be created.

On page 137 of March 15 issue of **American Nurseryman** J. F. Donaldson, Sparta, Ky., points out effective way to attract attention of prospective planters and to create demand for worthwhile stock.

On the same page Lee Bonnewitz, Van Wert, O., directs attention to the better varieties of peonies and iris which should be special inducement to planters in this direction.

Also, on the same page, there is suggestion in the matter of fruit growing—in the home orchards movement in East Texas.

If particular attention is given by a Nursery concern to careful grading, that fact could be stressed to advantage in appeals to local planters, as suggested in the article by William A. Weber on page 136.

On page 138 Keeper E. H. Wilson, of the Arnold Arboretum, in showing the obligation of Nurserymen to that institution, points out the beauties of a selection of ten ornamental varieties which might profitably be pushed for local business—with Mr. Wilson's special indorsement thereof.

On page 139 is the suggestion of arranging of planting schools to educate the public in the use and value of Nursery stock.

L. L. Kumlien of the D. Hill Nursery Company, on page 150, outlines briefly practical suggestions as to use of certain evergreens.

There are valuable suggestions of interest to retail salesmen in the report of Chairman T. Frank Andrews on pages 135 and 154.

All this falls under the general movement to make home-owning and home-living as popular as is automobile owning—referred to in the leading editorial on page 142 of the March 15 issue.

Local publicity by Nurserymen will be needed constantly to clinch the benefits to be obtained from the nation-wide publicity campaign contemplated by the American Association of Nurserymen.

The citation of practical aids in local publicity, given above, shows the importance of preserving files of the **American Nurseryman** for reference when special subjects in trade procedure come up.

The Waterbury, Conn., Republican last month published an article, nearly a column in length descriptive of the importance and comprehensive character of the operations of the Northeastern Forestry Company, Cheshire, Conn., of which F. S. Baker is the manager.

The American Nurseryman

Exclusively for Nurserymen
Chief Exponent of the Trade
Covers Its Field Like a Tent

ADVERTISEMENTS in the **American Nurseryman** reach every state in the Union, the trade throughout Canada and important points abroad.

The Journal's mailing lists are revised daily in this complete service, providing an unequaled medium for direct results.

It is the recognized logical medium for intercommunication throughout the trade. It is the only publication of the kind devoted exclusively to the American Nursery Trade. Its mailing lists number upwards of 5,000 names of Nursery concerns.

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THIS SPACE
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58 Cents Per Week
Less Than Yearly: $2.80 Per Month

COLORADO NURSERIES AWAIT CONVENTION VISITORS

Chairman W. S. Griesa, Lawrence, Kan., of the general committee on arrangements for the annual convention of the A. A. N. in Denver, June 20-22, was in Denver recently completing plans. In this connection a writer in the Florists Review directs attention to Nursery establishments in and near Denver.

The sales garden of the Roberts Rose Co., is unique, he says. Laid out with infinite care and planning, it has ben said by a prominent eastern Nurseryman to be the most elaborate and pretentious sales garden either in this country or abroad. There are in the neighborhood of 1,000 different varieties of plants and shrubs growing in the garden, which occupies only one acre of ground. However, it has the appearance of covering a much larger space, for John T. Roberts, Jr., president of the company and planner of the garden, has taken advantage of several factors producing optical illusions. The entrance to the garden is on a gallery at the highest point, with the grounds sloping gradually away. The posts of an arbor running through the grounds are set closer to each other as they recede from the gallery, thus accentuating the phenomena of perspective. Along with these, there are winding paths, undulating borders and the proper arrangement of large shrubs and trees, all of which tend to create an illusion of distance and space.

The downtown office and the sales garden of the Northern Nursery Co. are located within the very heart of Denver's retail business district.

There is a fine stock of 10,000 Chinese elms at the W. W. Wilmore Dahlia Gardens & Nursery. These were purchased just about a year ago and, since that time, the average caliber has increased almost 400 per cent, a fine tribute to the growing qualities of Colorado soil and climate, also to the expert attention and diligence of their caretaker, Charles Wilmore. Besides Nursery stock, this firm is interested in the growing of dahlias and gladioli. At convention time there will be 750,000 gladiolus plants about ready to bloom.

The Tolleson Nurseries also specialize in Chinese elms, besides handling a general line of ornamental trees and shrubs.

The M. J. Cullen Seed & Nursery Co. has built up a profitable seed business in addition to its Nursery business.

The Gutheil Park Nurseries constitute one of the best kept Nursery establishments in this part of the country.

Another item of interest to Nurserymen will be the method of gathering and selling thousands of evergreen seedlings from the government forest reservations, which is a specialty of the Colorado Gardens.

The city park system contains forty-two separate parks, each of them a model of fine landscaping. There is also a range of greenhouses in which are produced the blooming plants which beautify these parks during the summer. In this greenhouse, under the supervision of John Russell, there is a fine collection of odd and interesting plants gathered from all corners of the world.

A New Source of Business

Harry R. O'Brien, Worthington, O.

If Nurserymen are looking for new sources of business, and I judge that most of them are these days, I have one such to suggest. This is the commercial baby chick hatchery, of which there are now more than 10,000 scattered all over the United States.

In recent weeks, I have had occasion to visit a number of these hatcheries in Ohio and I noticed that a number of them have been planting ornamentals. I inquired in some instances as to where the shrubbery had been bought. One man who already has his grounds well planted, had employed a local Nurseryman this winter to put in a good foundation planting of evergreens around his dwelling near by. The idea struck me that here was a place where other Nurseries could sell good orders.

Then to my surprise, I saw in the November 15 issue of the International Baby Chick News, an article by C. A. Norman, of Knoxville, Tenn., president of the International Baby Chick Association, under the heading, "Dress Up Hatchery Surroundings." This is a house organ, published for members of the organization, with membership now numbering close to 1200 hatcheries.

I believe that Nurserymen could read this whole article with profit, so here it is:

"Last July and August, while traveling around over the country in connection with our poultry convention and other meetings, I could not help but be favorably impressed with the wonderful appearance of some of our hatchery plants, and equally surprised at the poor appearance of others.

"I reached the conclusion that some of our hatcherymen do not appreciate the importance of dressing up and beautifying their hatchery surroundings, likewise their home surroundings. I do not believe a sum ranging anywhere from $50 to $500 could be better expended than in the purchase of ornamental shrubs and flowering plants for our home and hatchery premises. Hatcherymen are always glad to have visitors, particularly visitors who may develop into customers, and I do not believe that any reasonable sum of money expended in beautifying our premises could be put to better use and may be considered first class advertising service."

The significance of this article by Mr. Norman is this: Many of these hatcheries are large affairs. It is not uncommon for them to have incubator capacity running from 100,000 eggs to several times that amount and constituting an investment of anywhere from $25,000 to $100,000.

Furthermore, these hatcheries have been enjoying prosperity. A survey made by a trade firm last summer and reported in the poultry trade papers indicated that 95 per cent of them are making money. I could name off-hand several only medium-sized plants whose net profits last season ranged from $15,000 to $40,000. Thus they can afford to spend some money in beautifying the surroundings of their plant, as Mr. Norman suggests.

Nurserymen may not realize it, but in the past ten years the commercial baby chick hatchery has become a new feature of rural life, taking its place alongside the flour mill, the garage, the general store, the grange hall, the grain elevator, the cooperative creamery—even the Nursery, if you please. Where there were only 50 such in 1909 and 250 in 1918, the latest figures showed 10,127 in the country in 1927. By late January the hatcheries are filling the incubators with eggs and the latter part of February sees them swinging into the busy selling and shipping season.

I visited one rather important hatchery not long since where there are only two or three straggling shrubs around the place. Yet the picture of this hatchery in its catalogue shows it all beautifully planted. The artist in the advertising agency who designed the catalogue knew his business and had the shrubbery painted in. That hatcheryman is surely ready for a call from a Nursery representative.

Planting Three Trees a Minute

Boy Scouts in Albany and vicinity have been planting a large number of trees from the New York State tree Nurseries at Camp Hawley, on Kinderhook Lake, 15 miles from Albany. The boys were divided into crews of three boys each and were lined up at a long rope. When a whistle is blown, one boy in each crew makes a hole in the ground and the rope moves forward to where the next row of trees is to be planted. The boys in the second row then drop the trees in the holes, while the third row tamps in the earth. It is estimated that each crew can plant three trees every minute.

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All clean and dry, big bales, burlap bales or wire bales, any size; at the right prices; in car loads or small lots; any amount you want.

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Imported Peat Moss

(GROUND PEAT)

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Write for folder and quantity prices.

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Mahaleb — Myro.

ULMUS PUMILA (Chinese Elm)

Seedlings — Transplants

PEAR TREES—2 yr. 11 16

Bartlett — Seckel
Flemish Beauty

NORWAY MAPLE

SCHWEDLERI MAPLE

FLOWERING CRAB

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"LIGHT AS Snowflakes" **Mulch**

Preserves soil moisture, prevents baking and cracking of soil, increases fertility, adds humus. Easiest and cheapest to apply.

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Specialties

Amoor River North Privet, 2 yr., 2-3 and 3-4 ft., well branched.
Bungei Catalpa, 4½-8 ft. stems.
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Lonicera Bella Albida, 2-3 to 5-6 ft.
Deutzia Pride 2-3 to 5-6 ft.
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Early Harvest B. B. root grown plants.
Long list of Ornamentals in generous supply.

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Elderberries	Hydrangea P. G.
Currants	Mallow Marvel
Gooseberries	Barberry Seedling
Grape Vines	Peonies
Horseradish	Honeysuckle
Asparagus	Euonymus Radicans
Rhubarb	Philadelphus Grand

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BOXWOOD
Young's Boxwood and Evergreens
FOR LINING OUT
My service and stock will please you.
Write for Wholesale Trade List
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Wholesale Nurseryman
GREENSBORO NORTH CAROLINA

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Splendid Stock
Write for Special Quotations.
LESTER C. LOVETT
Milford Delaware

Say you saw it in "American Nurseryman"

The Preferred Stock

Bring on Your Convention!

You bet we're going to Denver. We haven't missed a convention yet, and we don't know why we should begin now.

Besides, there's lots of nice mountain air around Denver, as Perk says, "that's just waiting to be inhaled."

Speaking of Perk, he tries to keep right on top of new things in Horticulture, and during the last few years has been busy working up a stock of two rare shrubs from the Orient. They're winners, too. One is Korean Spirea. It's somewhat like Van Houtte, but blooms about two weeks later, is more robust and is much more desirable in many ways. Unlike Van Houtte, the foliage is good all Summer long.

The other is called "Beauty Bush," a shrub of great hardiness and year-around beauty, and blooms about this time of year with a marvelous profusion of delicate pink flowers.

We've gotten out a folder showing these new specialties in colors, and if you haven't yet seen a copy, ask us for one at the convention . . . . The stock will be ready for distribution next Fall and Spring, and will help you build business and make you real profits. They are bound to be popular when generally known.

Also an advance price list will be out early in June, and there'll be some mighty interesting dope in that. Be sure to get your copy.

See you "out West."

Jack

Jackson & Perkins Company
Wholesale Only
Newark, New York.

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Specialists
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HERBST BROTHERS
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French Conditions of Sale

It is something of an undertaking to give an order for stock to some of the European Nurseries. For instance, L. Levavasseur, manager-owner of Louis Leroy's Nurseries, Angers, France, quotes in his current trade list the following "Extract from General Conditions of Sale," in catalogue:

The fact of sending us an order involves, on the part of the purchaser, his entire compliance with our General Conditions of Sale.

Any items charged at prices different from those quoted in this list would have been increased through market fluctuations.

Our goods are offered "subject to being unsold" or "variations" and in a general way all the affairs negotiated by our establishment are treated on our general conditions of sale related on our catalogues of the current season, consequently our sales involve legally the formal acceptance of the latter. In case of any litigation whatever, either for our sales, or our purchases, the one as well as the other are to be understood, accepted, treated and payable at Angers; we do not accept any other jurisdiction than those of the suitable Tribunals of Angers with the exclusion of all other tribunals seized either directly or indirectly, even by means of appeal in guarantee.—Our customers or purveyors renounce expressly at any other privilege of jurisdiction stipulated or not on their letters or invoices.

W. C. Reed, Vincennes, Ind., of W. C. Reed & Son, Vincennes Nurseries, has been elected alternate to the Republican National Convention, Kansas City, by the Indiana Republican State Convention. Mr. Reed was Senator Watson's county manager during the primary. He is the first vice-president and a director of the Chamber of Commerce of Vincennes.

T. Frank Andrews Leaves Chase Bros. Co.

T. Frank Andrews, sales manager of Chase Brothers Company, Rochester, N. Y., on June 1 severed his active service with

T. FRANK ANDREWS, Rochester, N. Y.

the company, though he retains his connection as stockholder and a director in the company.

Mr. Andrews is a veteran in the business, having been in the Nursery trade 28 years. For 24 years he has been with the Chase Brothers Company and is well known throughout the trade. He has long been an active member of the New York State Nurserymen's Association. His reports as chairman of the retail committee of that organization have been models of the kind, full of original thought and constructive suggestion in the interest of high grade, up-to-date effective merchandising. They have attracted wide attention. Mr. Andrews will take a needed rest.

The report on plantings of Manetti cuttings in the Pacific Northwest, as sent in by the Capital City Nursery Co., on page 260 of the last issue of this journal should have been dated Portland, Ore., as many of our readers know.

For Closer Check on Shipments

At a recent meeting of the California Regional Advisory Council of the California Development Association in Los Angeles, in an effort to devise a system for a closer check on shipments of Nursery stock, the council approved the plan of the agricultural committee to call a meeting of growers and Nurserymen in Los Angeles in the near future. It was pointed out that when the transportation of Nursery stocks was limited to common carriers it was possible to keep up a rigid inspection for pests, but that at present the widespread use of automobiles and trucks made a thorough check of the shipments impossible. Under existing conditions it was declared that thousands of pest-infected plants can be carried from one state to another.

The 1927 Yearbook of Agriculture is now being distributed by the United States Department of Agriculture. This volume is the second of a series designed to report recent agricultural developments in brief articles. It contains 320 articles, varying in length from 250 to 1,500 words, in which new scientific discoveries and progress in farm production and marketing are dealt with by department specialists.

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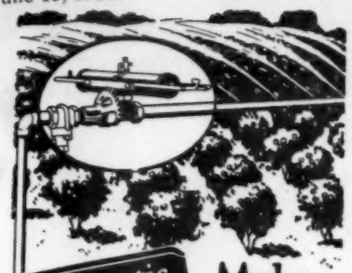

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Nitrogen for Apples

Such marked increases in yields of McIntosh apples followed applications of fertilizers containing nitrogen in tests carried on in a Western New York orchard last year by soil specialists at the New York Experiment Station in Geneva that the trials are to be repeated this coming season, say the station officials. The work will be continued this season under the immediate supervision of J. D. Harlan, assistant agronomist at the station.

"There are many apple orchards in New York in which the yields of fruit might be increased by the application of small amounts of nitrogen to each tree," says Mr. Harlan. "Trees growing in a grass sod, or in an orchard where the grass is allowed to grow beneath the trees, only the space between the trees being cultivated, are most likely to benefit from the use of nitrogen. Where good cultivation is maintained or where legume cover crops are plowed under every two or three years, nitrogen is less likely to give any response."

Field Station for San Jose, Cal.

Recognizing the needs of the Santa Clara Valley and the coast counties for experimental work in plant diseases under climatic conditions that prevail there, the University of California will, in the near future, start work on a deciduous fruit field station near San Jose. At this station will be permanently located the work that formerly was conducted at Mountain View from year to year, and which later has been done in a small way at a small station in San Jose.

California Quarantines Ohio — Quarantine against shipments of fruit and Nursery products to California from the State of Ohio was announced recently by George Hecke, state director of agriculture. The quarantine was made necessary by discovery of Oriental fruit moth in that state. Some 19 states are now on the embargo list from shipments into California on account of this pest, which is said was originally introduced into the United States on a present of some cherry trees from the Mikado of Japan to former President Taft.

Edgewater Nursery, Goshen, Ind., has been purchased by Simon Brouwer.—At Thomaston, Ga., Albert T. Matthews has started a Nursery business.—Owosso Nursery, Lansing, Mich., has been incorporated, $150,000.

Contents of Six Preceding Issues of the "AMERICAN NURSERYMAN"

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The Star Address in Nursery Trade Circles in Mid-Winter Season
By Harry N. Tolles, President Sheldon School, Chicago
At Annual Convention of the Illinois Nurserymen's Association
Chicago, January 18, 1928
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